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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,041	04/26/2001	Koji Yamazaki	35.C15344	6508

5514 7590 05/24/2002

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 05/24/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,041

Applicant(s)

YAMAZAKI ET AL.

Examiner

Christopher D RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any patented term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I, claims 1-14 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that the inventions are so closely related as to require a search of the other groups for a search of any one group. This is not found persuasive because the search for the process of group I requires, at most, a minimal search of the invention of group III, apparently the apparatus. The scope of the group III claims is also confusing as discussed in the last Office action, page 3. It is unclear if the invention claimed in group III is directed to statutory subject matter, a process, or apparatus. Applicants have not provided any clarification in the recent response that could demonstrate that the invention of group III is in proper form and contains patentably non-distinct subject matter. The invention of group II requires no search in either the process or apparatus subclasses.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant claims are indefinite because it is unclear if the "kinetic frictional deviation factor" in claims 2 and 3 is the same as the "kinetic frictional deviation" as presented in claim 1.

The "kinetic frictional deviation" in claim 1 is stated as a standard deviation of the "kinetic frictional force", but claim 2 defines the "kinetic frictional deviation factor" is defined as a rate of change of the kinetic frictional deviation per unit length in the length direction of the contact face to the contacting linear pressure. This appears to indicate that the "kinetic frictional deviation factor" is based on the "kinetic frictional deviation". However, in claim 3, dependent on claim 1, the claim limits "the kinetic frictional deviation factor", which is not present in claim 1 (unless this is actually the kinetic frictional force). It is not clear how the "kinetic frictional deviation factor" in claims 2 and 3 relates to the "kinetic frictional deviation" in claim 1. Claims 8-10 are similarly unclear because they use the same language in reference to the photosensitive member and the recording sheet.

Claims 1 and 8 are indefinite because it is unclear what the "intended relative speed" of the photosensitive member and the recording sheet defines. It appears that the intended relative speed relates to the kinetic frictional force, but clarification is requested.

Claims 7 and 14 are indefinite because it is unclear which JIS is limiting the claims. It appears that there is more than one JIS that permits the artisan to determine surface roughness, but the claims do not specify which JIS this is. Further, if the JIS is critical to determining the scope of the instant claims then the material is essential subject matter and must be incorporated into the specification. See MPEP 608.01(p).

Allowable Subject Matter

Claims 1-14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The cited but unapplied art discloses various imaging forming methods using non-monocrystalline silicon photoconductive layers and non-monocrystalline material surface layers, but fails to disclose the claimed processes having the claimed kinetic frictional deviation. WO 83/01127 discloses a process using such an amorphous silicon photosensitive member and a transfer drum (Figure 3) but does not disclose the claimed kinetic frictional deviation and does not provide a disclosure of the photosensitive member and transfer drum that would lead one of skill in the art to believe the kinetic frictional deviation was inherently present in the process. Similar remarks are pertinent to JP 5-45916 and Kusaba *et al.* in US Patents 5,715,510 and 5,669,052.

Meyer in US Patent 5,187,039 and Yoshitomi *et al.* in US Patent 4,764,448 discloses imaging members with specific surface roughnesses but are not used in processes as claimed and, therefore, cannot inherently have the claimed kinetic frictional deviation in the claimed processes. Sugata *et al.* in US Patent 4,898,798 discloses the coefficient of kinetic friction for a photosensitive member having an amorphous silicon material (col. 6, l. 27 – col. 7, l. 64). This reference is concerned with the frictional characteristics of the photosensitive member and a cleaning blade (col. 2, l. 58-65) and does not disclose the kinetic friction or its deviation with a cylindrical transfer member or a recording sheet carried on an image-transferring belt in the claimed process.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 703 308-2465. The examiner can normally be reached on most weekdays from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

cdr
May 21, 2002


CHRISTOPHER RODEE
PRIMARY EXAMINER